



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

July 19, 2022

1200 New Jersey Avenue, SE
Washington, DC 20590

DOT-SP 20371
(THIRD REVISION)

EXPIRATION DATE: 2026-06-30

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: Linde Gas & Equipment, LLC
Danbury, CT
2. PURPOSE AND LIMITATION:
 - a. This special permit authorizes the transportation in commerce of nitrous oxide in non-DOT specification multi-unit tank car tanks. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
 - b. The safety analyses performed in the development of this special permit only considered the hazards and risks associated with the transportation in commerce.
 - c. No party status will be granted to this special permit.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.301(f) in that non-DOT tanks require a pressure relief device, 173.314(c) and 179.301 in that non-DOT specification multi-unit tank car tanks are not authorized, except as specified herein.
5. BASIS: This special permit is based on the application of Linde Gas & Equipment, LLC dated June 20, 2022, and submitted in accordance with § 107.109.

6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Nitrous oxide	2.2	UN1070	N/A

7. SAFETY CONTROL MEASURES:a. PACKAGING: Packagings prescribed are:

(1) Non-DOT Specification 110A3000W multi-unit tank car tanks meeting the requirements described in AAR Docket Application 15286, dated November 8, 1961. Each tank must be fabricated from cross-rolled T-1 steel in compliance with details of Columbiana Boiler Company's drawings 71957-E on file with the Office of Hazardous Materials Safety (OHMS). New construction is not authorized. The gas pressure may not exceed 2,250 psia at 130°F.

(2) Non-DOT Specification 110A2000W multi-unit tank car tanks conforming to Columbiana Boiler Company's drawing 102692, Rev. 1 on file with APD. Each tank must be fabricated from ASTM A516 Grade 70 normalized steel.

b. TESTING: Each multi-unit tank car must be retested and inspected as prescribed in § 180.519 for DOT Specification 110A1000W multi-unit tank car tanks, except test pressure is 3000 psig for the non-DOT Specification 110A3000W tank and 2000 psig for the non-DOT Specification 110A2000W tank.

c. OPERATIONAL CONTROLS:

(1) The non-DOT Specification 110A2000W tank is authorized to be transported without pressure relief devices.

(2) For the non-DOT Specification 110A2000W tank, the filling density is restricted to a maximum value of 59%. Regardless of filling density, the gas pressure in the tank must not exceed 1,660 psig at 131 °F.

(3) The dew point of the gas must be maintained at temperature that is less than (-52 °F) at 1 atmosphere.

(4) Prior to first use, each tank must be cleaned in accordance with CGA Pamphlet 4.1 for Oxygen service.

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this special permit who receives a package covered by this special permit may reoffer it for transportation provided no modification or change is made to the package or its contents and it is reoffered for transportation in conformance with this special permit and the HMR.

b. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.

c. MARKING: Each multi-unit tank car tank must be marked “DOT-SP 20371”.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight and cargo vessel.10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel, or motor vehicle used to transport packages covered by this special permit.11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq.:

- o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
- o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
- o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when this special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) — “The Hazardous Materials Safety and Security Reauthorization Act of 2005” (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term “exemption” to “special permit” and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:



for William Schoonover
Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Material Safety Administration, U.S. Department of Transportation, East Building PHH-30, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at <https://www.phmsa.dot.gov/approvals-and-permits/hazmat/special-permits-search>. Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: BrM/ae